

ACCESSION NR: AP4035697

subsequently analyzed by the second analyzer. Air or neon was admitted to the collision chamber, and from the variation of the CO^{2+} , O^+ , CO^+ , and C^+ ion currents with the gas pressure in the collision chamber, the cross sections for the various dissociation processes were calculated. The gas escaping from the collision chamber through the slits defining the ion beam was removed by fast pumps, and a pressure of 3×10^{-7} mm Hg was maintained in the high vacuum portion of the apparatus. All the ion currents were linear functions of the pressure in the collision chamber over the range of pressures investigated (to 2×10^{-4} mm Hg). The O^+ and C^+ currents did not vanish with the pressure but approached the same finite value as the pressure was reduced. These residual currents were due to spontaneous dissociation of CO^{2+} , presumably via the tunnel effect (P.Dorman, J.Morrison, J.Chem.Phys., 35, 575, 1962). The mean life of CO^{2+} was 4×10^{-14} sec. Of the possible inelastic collision processes, the most frequent was charge exchange with the formation of CO^+ . The cross section for this process was 33×10^{-16} cm² in air and 18×10^{-16} cm² in neon. Of the CO^+ ions thus formed in air, about one-fifth dissociated either to C^+ and O or to C and O^+ . Those formed in neon did not. The direct dissociation by molecular impact to C^+ and O^+ occurred in neon with a cross section of 2×10^{-16} cm², but it did not occur in air. The other possible process occurred either to a very small extent or not at all. The differences between the behavior in neon and air are ex-

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plained in terms of the energy levels of the ions and molecules involved. The O^+ and C^+ lines were complex, consisting of a central peak and two symmetric side peaks. When there was no gas in the collision chamber, the central peaks were absent or small, but the side peaks remained. The side peaks are accordingly ascribed to dissociation of CO^{2+} to C^+ and O^+ with transfer of kinetic energy to the fragments, and the central peaks to dissociation of CO^+ formed by charge exchange. Similar triplets have been observed by F.M.Rourke, J.S.Sheffield, W.D.Davis and F.A.White (J.Chem.Phys., 31, 193, 1959). Their interpretation of this structure is criticized in some detail. "I express my gratitude to A.A.Perov and Z.Z.Laty*ov for a discussion of the results of the work." Orig.art.has: 6 formulas, 4 figures and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskii institut, Moscow
(Physicochemical Scientific Research Institute)

SUBMITTED: 25May63

ATD PRESS: 3085

ENCL: 00

SUB CODE: OP, NP

NR REF SOV: 006

OTHER: 009

Card 3/3

ACCESSION NR: AP4042009

8/0057/64/034/007/1317/1320

AUTHOR: Kupriyanov, S.Ye.; Perov, A.A.

TITLE: Cross sections for dissociation by collision with neon atoms of ions formed from propane

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.7, 1984, 1317-1320

TOPIC TAGS: ion, dissociation, ion bombardment, hydrocarbon, propane, neon

ABSTRACT: The cross sections for dissociation of hydrocarbon ions by collision with neon atoms were measured with a double mass spectrometer. The ions were formed by bombarding propane with 120 eV electrons and were accelerated to an energy of 3.5 keV. The collisions took place in a chamber containing neon at 1.8×10^{-4} tor. The mass spectrometer and experimental technique are described elsewhere (S.Ye. Kupriyanov and A.A. Perov, ZhTF 33, 823, 1963). The dissociation cross sections were obtained for $C_nH_m^+$ ions with $n = 3, m = 0$ to 8; $n = 2, m = 0$ to 5; and $n = 1, m = 3$. The tabulated cross sections were reproducible within 15%. The cross section for formation of $C_nH_{m'}$ from C_nH_m was greater for odd values of m' (other than unity) than for either of the neighboring even values, regardless of the parity of m . The

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ACCESSION NR: AP4042009

cross section for breaking a C-C bond of C_3H_m was $13.6 \times 10^{-16} \text{ cm}^2$ for $m = 8$ and decreased very rapidly with decreasing m to $0.65 \times 10^{-16} \text{ cm}^2$ for $m = 5$ and $0.37 \times 10^{-16} \text{ cm}^2$ for $m = 1$. The cross section for breaking one or more C-H bonds was relatively independent of m and ranged between $7.5 \times 10^{-16} \text{ cm}^2$ and $2.1 \times 10^{-16} \text{ cm}^2$. The ions with only two H atoms dissociated principally by C-H bond cleavage. It is suggested that the results might be explained by a reorganization of the ions with strengthening of the C-C bonds during the flight to the collision chamber. "We express our gratitude to Professor N.N. Tunitskiy for discussing the results of the work." Orig.art.has: 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L.Ya. Karpova
(Physico-chemical Scientific Research Institute)

SUBMITTED: 17Aug63

ENCL: 00

SUB CODE: NP, 00

NR REF SOV: 003

OTHER: 002

2/2

SAZHINOV, Yu.G.; KUPRIYANOV, S.Ye.

Excitation of ions formed in the ionization of molecules by
electrons. Zhur. fiz. khim. 36 no.9:1969-1972 S '62.
(MIRA 17:6)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.

АННУОВ. Kupriyanov, S. Ye., Perov, A. A.

1. 1.1. Description cross section of H₂ and H₂O

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1. [illegible]

2. [illegible] NR AP4046082

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NO REF SON [illegible] [illegible]

ACCESSION NR: AP4025915

S/0056/64/046/003/0833/0839

AUTHORS: Laty*pov, Z. Z.; Kupriyanov, S. Ye.; Tunitskiy, N. N.

TITLE: Ionization collisions of electrons with ions and atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46, no. 3, 1964, 833-839

TOPIC TAGS: ionization, ionization collision, electron ion collision, electron atom collision, mercury, xenon, krypton, argon, neon, singly charged ion, doubly charged ion, electron impact ionization, secondary ionization cross section, mass spectrometer background ionization, metastable excited ion

ABSTRACT: This is a continuation of earlier investigations (ZhETF v. 45, 815, 1963) of the ionization of singly and doubly charged ions by electron impact. The method of intersecting ion and electron beam was used to measure the cross sections for single ionization of

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ACCESSION NR: AP4025915

the ions Hg^+ , Xe^+ , Kr^+ , Ar^+ , Ne^+ , Hg^{2+} , Xe^{2+} , Kr^{2+} , and Ar^{2+} . The parent ions were obtained by ionizing the neutral atoms with a primary electron beam. The variation of the secondary ionization cross sections with the primary beam electron energy is determined. The ionization of neutral atoms by electron impact is found to be accompanied by formation of metastable excited ions with single, double, or triple charge. It is also shown that when the accelerating voltage is 2800 V, the background present in a mass spectrometer is due mainly to various ionization processes in which the metastable excited ions take part. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova
(Physicochemical Institute)

SUBMITTED: 14Sep63

DATE ACQ: 16Apr64

ENCL: 02

SUB CODE: PH

NO REF SOV: 002

OTHER: 015

Card 2/42

10

EXPERIMENTAL STUDY OF THE IONIZATION OF ATOMS AND MOLECULES BY ELECTRIC FIELDS

1. Eksp. i teor. fiz. 47, 10, 1964, 1771-1774

Ionization, stripped atoms, excited state, mass spectrometry

Experimental results are presented for the ionization of He⁺, Xe⁺, Xe²⁺, and Xe³⁺ ions near a metallic surface, with the existence of highly excited long-lived states

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1

APPROVED FOR RELEASE: 08/23/2000

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1"

ACCESSION NR: AP4042368

S/0056/64/047/001/0052/0060

AUTHORS: Kupriyanov, S. Ye.; Laty*pov, Z.Z.

TITLE: Detection of long-lived excited ions of the noble gases and mercury

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 1, 1964, 52-60

TOPIC TAGS: ionization, helium, xenon, krypton, argon, mercury, excited state, excitation spectrum, mass spectrometry

ABSTRACT: This is a companion to a paper by the authors (with A. A. Perov, ZhETF, 47, 21, 1964); Accession Nr. AP4042363), and is devoted to the production of singly, doubly, and triply charged long-lived highly excited ions, and also some metastable ions, by ionization of atoms of noble gases (Xe, Kr, Ar, Ne) and mercury with electrons. Only singly-charged excited ions were produced in the case of helium. The lifetimes were $\geq 10^{-6}$ sec. The investigations were car-

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ACCESSION NR: AP4042360

ried in crossed ion and electron beams in a double mass spectrometer with electron gun between two magnetic mass analyzers. The method is described elsewhere (Kupriyanov and Lityapov, ZhETF v. 45, 815, 1963; Lityapov, Kupriyanov, and N. N. Tunitskiy, ZhETF v. 46, 833, 1964). The excitation energy of the ions was determined by the method of secondary ionization of these ions. It is concluded from the potentials for the production of these ions that the excited ions are produced in states close to the states of their subsequent ionization. Orig. art. has: 4 formulas, 5 figures, and 1 table.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 03Feb64

ENCL: 02

SUB CODE: NP

NR REF SOV: 007

OTHER: 009

Card 2/4

ACCESSION NR: AP4042368

ENCLOSURE: 01

Energies of ground and metastable states of ions and experimental potentials for the production of excited ions, in eV.

	Hg ⁺	Xe ⁺	Kr ⁺	Ar ⁺
Ground states Основное состояние B^{n+}	10,43 14,83	12,13 23,96 24,38	14,00 28,00 20,62	15,76 32,16 33,38
Metastable states Метаустойчивые состояния B^{n+}		24,45 20,37	20,80 30,39	33,45 34,25
Основное состояние $B^{(n+1)+}$ B_{in}	29,18 20	33,34 33	38,50 38	43,38 43

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Con't on Enclosure 2

ACCESSION NR: AP4042368

ENCLOSURE: 02

Con't from Enclosure 1

Ne+	He+	Hg+	Xe+	Kr+	Ar+	Xe+
21,56	24,58 65,38	29,18 34,49 31,88 36,41 39,73 41,30	33,34 35,44 37,05 47 48,05 49 49,80	38,56 39,79 42,65 55,73 57,87 58,45 58,73 60,28	43,38 45,06 47,45 61,42 66,32	65,42
62,6 62	78,08 70	61,68	65,42 65	75,76	84,26	110,88 110

Card 4/4 *The very lowest metastable states are not shown for some of the ions

"APPROVED FOR RELEASE: 08/23/2000

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CIA-RDP86-00513R000927610014-1"

L 10835-66 EWT(1) AT/GS

SOURCE CODE: UR/0000/65/000/000/0023/0026

ACC NR: AT5023429

AUTHOR: ^{44, 55} Kupriyanov, S. Ye.

ORG: none

TITLE: Excitation and dissociation of ions due to collision with atoms and molecules and their correlation with mass spectra

SOURCE: ^{44, 55} Simpozium po elementarnym protsessam khimii vysokikh energiy. Moscow, 1963. Elementarnyye protsessy khimii vysokikh energiy (Elementary processes of the chemistry of high energies); trudy simpoziuma. Moscow, 1965, 23-26

TOPIC TAGS: excited state, ion, particle collision, ion energy, mass spectrum, neon

ABSTRACT: Mass spectra of excited molecules and ions and mass spectra of their dissociation due to collision with atoms and molecules were studied to determine the structure, nature, and energetic state of molecular ions. Good correlation was found between the mass spectra of C_3H_3N and $n-C_4H_{10}$ obtained during electron impact with the mass spectra of dissociation of the corresponding ions due to single collision with neon atoms. An excellent agreement was found among mass spectra of dissociation of C_2H_4 ions which originated from C_2H_4 , C_3H_8 , and $n-C_4H_{10}$, and among the mass spectra of dissociation of C_2H_4 ions which originated from C_2H_2 , C_2H_4 , C_3H_3N , C_3H_8 , and $n-C_4H_{10}$. This agreement for the mass spectra of dissociation of ions stems from the

Card 1/2

L 10835-66

ACC NR: AT5023429

fact that the energy of all C-C in ions is equal. Orig. art. has: 2 tables.

SUB CODE: 07, 20 SUBM DATE: 23Feb65/ ORIG REF: 010/ OTH REF: 002

jw
Card 2/2

L 10834-66 SWT(1)/LNA(m)-2 IDP(c) AI/35

ACC NR: AT5023430

SOURCE CODE: UR/0000/65/000/000/0026/0027

AUTHOR: ^{44,55}Latypov, Z. Z.; ^{44,55}Kupriyanov, S. Ye.

58

55

B 11

ORG: none

TITLE: Mass-spectra of excited molecular ions

SOURCE: ^{44,55}Simposium po elementarnym protsessam khimii vysokikh energii. Moscow, 1963. Elementarnyye protsessy khimii vysokikh energii (Elementary processes of the chemistry of high energies); trudy simpoziuma. Moscow, 1965, 26-27

TOPIC TAGS: mass spectrum, particle collision, ion, excited electron state, particle collision

^{21,44,55}ABSTRACT: Mass spectra (reported in the literature) obtained during collisions of molecules with electrons photons and slow ions and those obtained during collisions of ions with atoms and molecules were cross-compared with the aim of finding their common features. A coincidence of mass spectra was found in various collision processes having a similar average ion excitation energy and a similar ion energy distribution function. Mass spectra of the ion-electron collision coincide with mass spectra of the ion-photon collisions when $E_e - I < I$, where E_e is electron energy, and I is ionization energy of a molecule. When $E_e - I > I$, mass spectra of the fragment ions resulting from ionization of molecules due to collision with electrons coincide with

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2

L 10834-66

ACC NR: AT5023430

3

mass spectra of dissociation of fast ions due to collision with neutral particles. Both the established dependence of mass spectra upon excitation energy and the found correlation between the mass spectra of molecule-electron, ion-atom, and ion-molecule collisions, make it possible to predict the mass spectra of molecular ions resulting from molecular ion-electron collisions. Thus the mass spectra taken during the collision of NH_3^+ and CH_4^+ ions with electrons have common features. Orig. art. has: 2 formulas.

SUB CODE: 07,20 SUBM DATE: 23Feb65/ ORIG REF: 000/ OTH REF: 000

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Card 2/2

"APPROVED FOR RELEASE: 08/23/2000

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As a rule, mass strikes in the USSR are

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CIA-RDP86-00513R000927610014-1"

AUTHOR: Kurpiyanov, S. Ye.

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1"

LATYPOV, Z.Z.; KUFRIYANOV, S.Ye.

Mass spectra and excitation energies of ions. Zhur.fiz.khim. 39
no.7:1572-1576 J1 '85. (MIRA 18:8)

1. Moskovskiy fiziko-khimicheskiy institut imeni I.Ya.Karpova.

ABSTRACT The dissociation of various ions during the reaction of methyl

... the standpoint of the statistical theory of mass spectra, and the results were

"APPROVED FOR RELEASE: 08/23/2000

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APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1"

ASSOCIATED PHYSICO-KHIMICHESKIY INSTITUT im. L. Ya. Karpova (Physicochemical
Institute)

Card 2/3

"APPROVED FOR RELEASE: 08/23/2000

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"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1

ACCESSION NR: AP5015428

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927610014-1"

L 15559-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JB

ACC NR: AP6004416

SOURCE CODE: UR/0051/66/020/001/0163/0165

AUTHOR: Kupriyanov, S. Ye.

ORG: none

TITLE: Excitation functions for high long-lived levels in atoms of inert gases

SOURCE: Optika i spektroskopiya, v. 20, no. 1, 1966, 163-165

TOPIC TAGS: excited electron state, inert gas, mass spectrometer, ion source, meta-
stable state

ABSTRACT: The author studies the excitation of high levels in atoms and molecules of inert gases to confirm the theoretical prediction of highly excited states in these gases similar to those in hydrogen. The experimental study is based on ionization of highly excited atoms A^* close to a metal surface M : $A^* + M \rightarrow A^+ + M^-$. A mass spectrometer with a two-chamber ion source was used. The experimental conditions were chosen in such a way that the ions formed in the first chamber could not leave the ion source and only ions formed in the second chamber could leave. The most probable reaction for ion formation under these conditions is that mentioned above.

Card 1/2

UDC: 539.186.2 : 661.936

L 15559-66

ACC NR: AP6004416

The excitation curves show a rapid increase in ion current near the threshold to a comparatively sharp first maximum located at an electron energy close to twice the threshold energy. Following this peak is a broader maximum (or several broader maxima) in the higher electron energy region. The first sharp maximum may be caused by electron transition to all highly excited levels to which transitions are optically forbidden. The broad maximum may be due to optically allowed transitions to high states of the atoms. It may be assumed that the shape of functions for excitation of high long-lived levels in atoms in the case of electron impact is due to superposition of curves which are similar in shape to known excitation functions for low optical and metastable states of the atoms. Orig. art. has: 2 figures, 1 formula.

SUB CODE: 20/ SUBM DATE: 19Sep64/ ORIG REF: 009/ OTH REF: 006

PC
Card 2/2

ACC NR: AP7000393

SOURCE CODE: UR/0386/66/004/009/0345/0348

AUTHOR: Kupriyanov, S. Ye.

ORG: Scientific Research Physicochemical Institute (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: Mass-spectrometric observation of long-lived auto-ionization states of the ions Ca^+ and Sr^+

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 9, 1966, 345-348

TOPIC TAGS: mass spectrometry, calcium, strontium, excited state, autoionization, ionization phenomenon

ABSTRACT: The purpose of the investigation was to check whether Ca^+ and Sr^+ ions can be produced in auto-ionization states that retain their excitation long enough ($> 10^{-6}$ sec) to render them observable with the aid of a mass spectrometer. The investigation was carried out with a double mass spectrometer described earlier (ZhTF v. 33, 823, 1963). A beam of Ca^+ or Sr^+ ions accelerated to 2.8 kev was further ionized in a chamber and the doubly-charged Ca^{2+} or Sr^{2+} ions were separated by a magnetic analyzer and recorded with electrometric amplifiers. These doubly-charged ions could be formed from the singly-charged ions (A^+) via three basic processes: (i) auto-ionization $\text{A}^+ \rightarrow \text{A}^{2+} + e$, (ii) stripping by collision with atoms and molecules of the residual gases $\text{A}^+ + \text{M} \rightarrow \text{A}^{2+} + \text{M} + e$, (iii) ionization near metallic surfaces $\text{A}^+ + \text{Me} \rightarrow \text{A}^{2+} + \text{Me}$. By

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ACC NR: AP7000393

varying the conditions of the experiment, any one of the processes could be separated and the others suppressed. The procedure used to identify the process that leads to these doubly-charged ions is described. The experiments have shown that the ion current I of the doubly-charged ions Ca^{2+} and Sr^{2+} formed from the singly-charged ions changes with gas pressure like $I = k + ap$, where k and a are constants. Its intensity is proportional to the intensity of the initial singly-charged ions and to the electron current. The ionization curves of Ca^{2+} and Sr^{2+} have an unusual form, attributed to rapid auto-ionization processes occurring in the ion source at electron energies corresponding to the binding energy of one of the internal electrons. It can also be expected that other ions, isoelectronic to those investigated, can also have auto-ionization states with large lifetimes. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 19Jul66/ ORIG REF: 002/ OTH REF: 004
ATD PRESS: 5107

Card 2/2

ACC NR: AP6036049

SOURCE CODE: UR/0056/66/051/004/1011/1013

AUTHOR: Kupriyanov, S. Ye.

ORG: Physicochemical Institute im. L. Ya. Karpov (Fiziko-khimicheskiy institut)

TITLE: Scattering of highly excited argon atoms on hydrogen and the formation of ArH^+ ions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 51, no. 4, 1966, 1011-1013

TOPIC TAGS: argon, argon atom, argon atom scattering, argon ion formation, hydrogen molecule, argon atom collision, argon hydrogen collision, collision

ABSTRACT: Scattering of highly excited argon atoms on hydrogen is studied in a mass spectrometer with a double-chamber ion source. The total scattering cross section is $\geq 4 \cdot 10^{-14} \text{ cm}^2/\text{molecule}$. It is shown that ArH^+ ion formation occurs during encounters between highly excited argon atoms and hydrogen molecules. Orig. art. has: 2 figures and 7 formulas. [Author's abstract] [AM]

SUB CODE: 20/SUBM DATE: 16Apr66/ORIG REF: 002/OTH REF: 003/
Card 1/1

ACC NR: AP 7001310

SOURCE CODE: UR/0057/66/036/012/2161/2163

AUTHOR: Kupriyanov, S. Ye.

ORG: Scientific Research Physicochemical Institute im. L.Ya. Kapov, Moscow (Nauchno-issledovatel'skiy fiziko-khimicheskiy institut)

TITLE: Dissociation of singly charged positive CD sub 5, CH sub 5, and Cd sub 4 ions by collision with neon atoms and air molecules

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 12, 1966, 2161-2163

TOPIC TAGS: ion, deuterium compound, dissociation, molecular property, air, argon, particle cross section

ABSTRACT: The author has employed a double mass spectrometer to measure the cross sections of argon atoms and air molecules for dissociation of CD_5^+ , CH_5^+ , and CD_4^+ ions. The experimental technique has been described elsewhere by the author and A. A. Perov (ZhTF, 33, S23, 1963). Despite the title of the paper, only the CD_5^+ and CD_4^+ data are reported and discussed. The CD_4^+ ions were obtained by electron impact ionization of CD_4 , and the CD_5^+ ions were obtained by reaction of CD_4^+ ions with CD_4 . The cross sections of neon atoms and air molecules for a number of different possible dissociation processes were measured and are tabulated. The two cross sections (argon and air) for each different process were very nearly equal. The total dissociation cross section was $1.6 \times 10^{-16} \text{ cm}^2$ for CD_5^+ and $3.3 \times 10^{-16} \text{ cm}^2$ for CD_4^+ . The fluxes of the

UDC: 539.196

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ACC NR: AP 7001310

several dissociation products were proportional to the pressure in the scattering chamber. This indicates that the data relate to single collisions, and that both CD_4^+ and CD_5^+ are stable. This finding is in conflict with data presented by F.H. Field and J.L. Franklin (Electron Impact Phenomena and the Properties of Gaseous Ions, 1957), who find that CD_4^+ is unstable, although CD_3H^+ , $CD_2H_2^+$, and CDH_3^+ are stable. It is noted that very short-lived unstable CD_4^+ ions might escape detection in the present experiments because some 6 microseconds were required for an ion to traverse the second analyzer of the mass spectrometer. The fact that the dissociation cross section for CD_4^+ is greater than that for CD_5^+ is discussed briefly, and it is suggested that in addition to the C-D bonds, there may be significant forces between the D atoms in CD_5^+ . The author thanks Professor N.N. Tunitskiy for discussions. Orig. art. has: 1 figure and 1 table.

SUB CODE: 20

SUBM DATE: 05Nov65

ORIG. REF: 002 OTH REF: 003

Card 2/2

KUPRIYANOV, V., kapitan

Education of the brave. Komm.Vooruzh.Sil 1 no.6:39-41 Mr '61.
(MIRA 14:8)

(Parachute troops)

USSR/Chemical Technology -- Chemical Products and Their Application. Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 1708

Author: Kupriyanov, V.

Institution: None

Title: Some Special Features of the Technology of Air-Entraining Concrete

Original

Periodical: Stroit. materialy, izdeliya i konstruktsii, 1956, No 5, 11-13

Abstract: A description of air-entraining compounds and methods used in stabilizing the cellular structure used abroad and in the USSR. Data are presented on the effect produced on the quality of cellular concrete by the composition of the concrete, the type of cement used, and the type of hydrothermal treatment applied in the production of the concrete.

Card 1/1

KUPREYANOV, V., inzh.

Angular manipulator for the ZII-155 and ZII-158 motorbuses.

Avt. transp. 42 no.9:32-33 S '64.

(MIRA 17:11)

KUPRIYANOV, V.

Meeting of the Kishinev Medical Institute. Zdravookhranenie
2 no.3:63-64 My-Je '59. (MIRA 12:10)
(MOLDAVIA--MEDICINE)

KURRIYANOV, V., inzh.

Unit for boring bearing seats in gearbox crankshafts. Avt.
transp. 42 no. 5:32 My '64. (MIRA 17:5)

UDOVENYA, V.; KUPRIYANOV, V.

Movable machine for pressing rear axle housings in or out. Avt.
transp. 32 no.3:25-26 Mr '54. (MLRA 7:8)
(Power presses) (Automobiles--Repairing)

KUPRIYANOV, V., kandidat tekhnicheskikh nauk.

Some characteristics of gas concrete technology. Stroi.mat.,
izdel.i konstr. 2 no.5:11-13 My '56. (MLRA 9:8)

1. Nauchnyy sekretar' komissii po problemam stroitel'stva AN SSSR.
(Concrete)

GORYAINOV, K., doktor tekhn. nauk.; VOLCHEK, I., kand.tekhn.nauk;
KUPRIYANOV, V., kand.tekhn. nauk; LIZOGUB, A., inzh.

Using cinder from heat and electric power plants in making large
porous blocks. Stroil. mat. 4 no.8:14-17 Ag '58. (MIRA 11:9)
(Cinder blocks)

KUPRIYANOV, V., inzh.

Will the blast furnace make steel? Izobr. 1 rats. no.7:27-28 J1 '62.
(MIRA 16:3)

(Blast furnaces)

BUGROV, N.S.; KUPRIYANOV, V.A.

Device for oxygen-powder piercing of steel-tapping holes.
Metallurg 7 no.6:23-24 Je '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktor~~skiy~~
institut metallurgicheskogo mashinostroyeniya.
(Metallurgical furnaces--Equipment and supplies)
(Gas welding and cutting)

MEDVEDEV, Yuliy Emmanuilovich; CHARNYI, A.Kh., nauchn. red.;
KUPRIYANOV, V.A., nauchn. red.; SOKOLOV, O.I., red.;
ATROSHCHENKO, L.Ye., tekhn. red.

[The path of metallurgy] Puti metallurgii. Moskva, Izd-
vo "Znanie," 1963. 46 p. (Novoe v zhizni, nauke, tekhnike.
IV Seriya; Tekhnika, no.17) (MIRA 16:10)
(Metallurgy)

KUPRIYANOV, V. A

СИНТЕЗ И СВОЙСТВА НАФТЕРОВЫХ УГЛЕВОДОРОДОВ
С ДЛИННОЙ БОКОВОЙ ЦЕПЬЮ

А. В. Куприянов, В. В. Зарубин, А. В. Мухомов,
В. В. Мухомов, В. А. Нурбаев

VIII Mendeleev Congress for General and Applied Chemistry in
Section of Chemistry and Chemical Technology of Fuels,
publ. by Acad. Sci. USSR, Moscow 1979

abstracts of reports scheduled to be presented at above mentioned congress,
Moscow, 15 March 1979.

S/081/62/000/001/049/067
B158/B101

AUTHORS: Bashilov, A. A., Kupriyanov, V. A.

TITLE: Application of sodium hydride for hydrogenation and desulfurization of petroleum products

PERIODICAL: Referativnyy zhurnal. Khimiya, No. 1, 1962, 441, abstract 1M99 (Tr. Groznensk. nef. in-t., sb. 24, 1960, 8-13)

TEXT: Hydrogenation tests on a petroleum fraction boiling at 71-260°C were carried out in a laboratory hydrogenation unit; 160 g of metallic Na were fed into the reaction vessel; the experimental conditions were: 413°C, 30 atm pressure, feeding rate of crude 1.1 g crude per g Na in 1 hr, H₂ fed at 600 normal liters per liter crude. Results show that metallic Na can be used as hydrogenating and hydrodesulfurizing catalyst in the processing of crude oil. A layout of the unit is presented.
[Abstracter's note: Complete translation.]

✓

Card 1/1

KUPRIYANOV, VA.

5. 7300

AUTHORS: Darsanovichik, A. E., Lavrent'ev, V. A., 8/020/60/131/02/043/071
Lyuter, A. V., Koz'mikova, G. P., 8011/8011
Kupriyanov, V. A.

TITLE: Synthesis and Properties of Naphthenic Hydrocarbons With a Long
Side Chain

PERIODICAL: Doklady Akademi nauk SSSR, 1960, Vol 131, Nr 2, pp 367 - 370
 (USSR)

ABSTRACT: The authors wanted to work out a general method and conditions for the synthesis of technical fractions of the substances mentioned in the title, as well as the study of the properties of these fractions. Propylene, butylene, amylene, hexylene, and heptylene were used for the purpose. As a result of the experiments conducted at the authors' institute, a 3-stage scheme of synthesis was suggested: 1) synthesis of clofine with a given number of C-atoms, or polymerization, respectively. A dehydrated pentane-amylene fraction from thermal cracking, purified from the sulphur compounds, was utilized. The catalyst was phosphoric acid on kieselgur. Clofine with ramified structure were obtained in this connection. The highest yield of isodecenes occurred at 170-180°, pressure of 30-60 atm, volume rate 3-6 h⁻¹. Amylenes

Card 1/4

ASSOCIATION: Greenenichy neftyany nauchno-issledovatel'skiy institut
 (Greeny Scientific Research Institute of Petroleum)

PRESENTED: November 22, 1959, by N. A. Kuzanichy, Academician

SUBMITTED: November 25, 1959

GONIKBERG, M.G.; DOROGUCHINSKIY, A.Z.; MITROFANOV, M.G.; GAVRILOVA, A.Ye.;
KUPRIYANOV, V.A.; MIKHAYLOVSKIY, V.K.; VOVK, L.M.

Homogenous demethylation of toluene. Report No.1. Basic indices
of the process at 750-790 C. Neftekhimiya 1 no.1:46-53 Ja-F
'61. (MIRA 15:2)

1. Institut organicheskoy khimii AN SSSR imeni N.D.Zelinskogo
i Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.
(Toluene) (Methyl group)

DOROGOCHINSKIY, A.Z.; GONIKBERG, M.G.; MITROFANOV, M.G.; KUPRIYANOV, V.A.;
VOVK, L.M.

Homogenous demethylation of toluene, Report No. 2. Experiments with gas cycling. Neftekhimiia 1 no.4:501-504
Jl-Ag '61. (MIRA 16:11)

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut
i Institut organicheskoy khimii AN SSSR imeni N.D.
Zelinskogo.

KUPRIYANOV, V.A.

5

S/065/62/000/004/001/004
E075/E136

AUTHORS: Gonikberg, M.G., Dorogochinskiy, A.Z.,
Nitrofanov, M.G., Gavrilova, I.Ye., Dronin, A.P.,
Kupriyanov, V.A., Makar'yev, S.V., Zamanov, V.V.,
and Vovk, L.M.

TITLE: A process of thermal dealkylation of aromatic
hydrocarbons

PERIODICAL: Khimiya i tekhnologiya topliv i masel,
no.4, 1962, 11-15

TEXT: As a result of investigations carried out in the
years 1953-1960 in IOKh AN SSSR and GrozNII, a technological
scheme was developed for an industrial process of thermal
dealkylation of monocyclic aromatics such as toluene and methyl-
naphthalenes. A pilot plant for the process producing
30 000 tons of benzene per annum consists of a small number of
simple units. It contains a tubular furnace of only
3 mil. cal/hour capacity. The main production indices for the
plant are as follows: reactor pressure 50 atm; maximum
temperature 790 °C; separator temperature 35 °C;
Card 1/2

5

A process of thermal dealkylation... S/065/62/000/004/001/004
E075/E136

pressure in benzene column 0.1-0.3 kg/cm²; temperature in benzene column, top 87 °C, bottom 130 °C; pressure in the recycle stock separation column 0.1-0.3 kg/cm²; temperature in the recycle stock separation column, top 260°, bottom 304 °C; molar ratio hydrogen/feedstock 4:1; space velocity of feed 4.0 h⁻¹; consumption of hydrogen 2.1% wt of feedstock; yield of benzene 70.7% wt of toluene. It was calculated that high grade benzene produced by the process from petroleum derived toluene is considerably cheaper than that obtained currently in the coking industry. It was established that thermal demethylation of methyl naphthalenes (700 °C, 50 atm) gives naphthalene with a yield of ca. 50% wt of feedstock after one cycle. The most suitable raw materials for the process are aromatic products obtained during reforming, pyrolysis and catalytic cracking processes. It is expected that the dealkylation process will constitute an important source of benzene and naphthalene for the Soviet petro-chemical industry. There are 1 figure and 1 table.

Card 2/2

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GONIKBERG, M.G.; DOROGUCHINSKIY, A.Z.; GAVRILOVA, A.Ye.; KOMANEIKOVA, R.A.;
MITROFANOV, M.G.; KUPRIYANOV, V.A.

Determination of the naphthalene and alkyl naphthalene content of
stocks and dealkylation products. Neftekhimiia 3 no.6:916-921 H-D
'63. (MIRA 17:3)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo i
Groznerskiy neftyanoy nauchno-issledovatel'skiy institut.

KUPRIYANOV, V.A.; DOROGCHINSKIY, A.Z.; MEL'NIKOVA, N.P.

Studying the hydrogenation of fractions of industrial
isodecyl benzene on a nickel catalyst. Trudy GrozNII no.
15:278-293 '63. (MIRA 17:5)

KUPCHENKO, V.F.

New trends in the drilling and completion of wells in the USSR. (MIRA 17:8)

1. Consideration of the role of the geologist in the development of the oil and gas industry.

KUPR YANOV, V.F.

Selecting pumps and determining the working parameters in pipelines.
Tramp. i khran. nefti i nefteprod. no.8:17-20 '64. (MIRA 17:9)

1. Gosudarstvennyy institut po proyektirovaniyu zavodov tyazhelo
mashinostroyeniya.

KUPRIYANOV, V.F.

Certain problems in pipeline transportation. Transp. i khran.
nefti no.8:3-7 '63. (MIRA 17:3)

1. Gosudarstvennyy institut po proyektirovaniyu magistral'nykh
truboprovodov.

KUPRIYANOV, V.I., inzh.

Simple, reliable, and advantageous. Put' i put. khoz. 9
no.11:21 '65. (MIRA 18:11)

1. Moskovsko-Smolenskaya distantsiya puti.

GETMANSKIY, I.K.; VAGINA, I.K.; KUPRIYANOV, V.M.

Powdered "Molodost" shampoo based on purified sodium alkyl sulfates
of synthetic secondary alcohols. Trudy NIISZHIMSA no.3:95-96 '62.
(MIRA 16:12)

L 14047-66 SWT(1)/EWA(h)

ACC NR: AR5020043

SOURCE CODE: UR/0031/65/000/012/D044/D045

AUTHOR: Perevertayev, V.D.; Metsik, M.S.; Kupriyanov, V.M.

ORG: none

15
TITLE: Photoelectronic device for studying variations in the thickness of an adsorption film and the surface electroconductivity of fresh mica crystal chips

SOURCE: Ref. zh. Khimiya, Abs. 12053

REF SOURCE: Sb. Kratkiye soobshch. o nauchno-issled. rabotakh za 1961 g. Irkutskiy un-t. Irkutsk, 1963, 47-49

TOPIC TAGS: mica, photoelectric detection equipment, electric conductance

TRANSLATION: A description is given of a photoelectronic device for the study of variations in the thickness of an adsorption film and of the surface electroconductivity of fresh mica crystal chips; this device eliminates the shortcoming of devices previously used. The crystal is placed in a carefully isolated vacuum chamber. The chipping of the crystal and the application of Ag-electrodes are done automatically. The concentration of H₂O steam in the chamber is done by evaporating frozen H₂O in liquid H₂. A continuous change in temperature is achieved by special thermostats. The variations in the intensity of the light flow is registered by FEU-29. The signal is amplified and upon detection it is transferred to the C-191 loop oscillograph. The data is recorded on a moving photofilm. I. Zimakov.

SUB CODE: 09, 20

14/1

Card 1/1

2

GETMANSKIY, I.K.; inzh.; KUPRIYANOV, V.M.; VAGINA, I.K.; LESHCHENKO, P.S.,
inzh.; SKRYPINA, T.R.

"Astra" washing powder. Masl.-zhir.prom. 28 no.2:45-46 F
'62. (MIRA 15:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh
zhirozameniteley i moyushchikh sredstv (for Getmanskiy,
Kupriyanov, Vagina). 2. Shebekinskiy kombinat sinteticheskikh
zhirnykh kislot i zhirnykh spirtov (for Leshchenko, Skrypina).
(Shebekino—Washing powders)

L 13325-63 EWT(1)/BDS AFFTC/ASD GG/IJP(C)

ACCESSION NR: AP3002752

S/0120/63/000/003/0193/1095

AUTHOR: Perevertayev, V. D.; Kupriyanov, V. M.; Mitsik, M. S.

57

TITLE: Photoelectronic thickness gage for thin films

SOURCE: Pribory* 1 tekhnika eksperimenta, no. 3, 1963, 193-195

TOPIC TAGS: thickness gage

ABSTRACT: A film-thickness measuring instrument is described which is based on polarization of light reflected by a film-coated body. Variation in thickness of 12-300-Angstrom films can be measured; also some other measurements, such as surface electric conductivity can be made. A provision for N370M recording instrument is made. The process must last 2 sec or more in order to be measured. A block diagram and electrical schematics are presented. Orig. art. has: 4 figures.

ASSOCIATION: Irkut*skiy gosudarstvenny*y universitet (Irkutsk State University)

SUBMITTED: 01Jul62

DATE ACQ: 12Jul63

ENCL: 00

SUB CODE: PH, IE

NO REF SOV: 007

OTHER: 001

Card 1/1

KUPRIYANOV, V. P., Engineer

"Large-Shield Falsework for the Erection of Bulky Concrete Structures."
Sub 11 Jun 51, All-Union Correspondence Polytechnic Inst, Ministry of Higher
Education USSR.

Dissertations presented for science and engineering degrees in Moscow during
1951

SO: Sun. No. 480, 9 May 55

KUPRIYANOV, V. P.

USSR/Geography - Kakhov

Feb 53

"For Assistance to Builders," V. P. Kupriyanov,
Cand Tech Sci

Nauka i Zhizn, No 2, pp 4-6

Gives general description of the South Ukrainian
and North Crimean Canal, and the new hydro-electric
power station at Kakhov. This is another achieve-
ment of the fifth Stalin five-year plan.

271T71

USSR/Scientific Organization

FD-1391

Card 1/1 : Pub. 41-18/18

Author : Domanitskiy, S. M. (1), Kupriyanov, V. P. (2), Baron, L. I. (3), and Demidov, L. G. (4)

Title : In the scientific establishments of the Department of Technical Sciences of the Academy of Sciences of the U.S. S. R.

Periodical : Izv. AN SSSR. Otd. tekhn. nauk 3, 155-172, Mar 1954

Abstract : Five articles with description of scientific activity as follows: (1) "Problems of the Automatization of the Consumer-Goods Industry" -- a report on a conference held 8-13 March, 1954, in Moscow. (2) "Conference on Heat-Insulating Materials" -- a report on problems of production and use of heat-insulating materials in construction industry; conference was held in 1953. (3) "Development of Improved Methods for Determining Content of Free Silica in Mine Dust and Rocks" -- a report on conference called by Commission for Prevention of Silicosis, 24 March 1954. (4) "All-Union Conference on Coal Dressing" -- a report on conference held in 1953 in Moscow. (5) "Defense of Dissertations" -- report on defense of dissertations by applicants for scientific degrees.

Institution :

Submitted :

KUPRIYANOV, V.P.

Conference on heat insulation materials. Izv. AN SSSR. Otd. tekhn.
nauk no.3:158-163 Mr '54.
(Insulation(Heat))

(MLRA 7:7)

Kupriyanov V. P.
USSR/Scientific Organization

FD-1105

Card 1/2 Pub. 41-17/17

Author : Syskov, K. I., and Kusakin, N. D. (1), Kupriyanov, V. P. (3)

Title : In scientific establishments of the Department of Technical Sciences
 of the Academy of Sciences of the U.S.S.R.

Periodical : Izv. AN SSSR. Otd. tekhn. nauk 4, 154-160, Apr 1954

Abstract : Describes activity of various scientific institutions in four articles:
 (1) "Seminar of the Institute of Mineral Fuels, Commemorating Academician N. P. Chizhevskiy" -- a report on a seminar held 14 May 1954 on the subject of IGI (Institute of Mineral Fuels) coke ovens developed (1948) on the basis of research done by N. P. Chizhevskiy. (2) "Conference on the Problem of the Mechanics of Cloth" -- a report on conference held March 1954, at Institute of Mechanics of the Academy of Sciences of the USSR, on construction, technology, and durability of cloth.

USSR/Scientific Organization

FD-1105 & 1106

Card 2/2 Pub. 41-17/17

Abstract : (3) "Conference on use of Local Building Materials for Agricultural Construction" -- a report on conference held March 1954 by Commission on Construction Problems and the All-Union Scientific and Technical Society of the Silicate Industry on ways of increasing the use of binding materials from local sources as slag, ashes, gypsum, and lime.
(4) "Works of the Institute of Mineral Fuels, Published in 1953" -- a report, including chapter titles, on two publications of the Academy of Sciences of the USSR: "An Investigation of Contemporary Principles for Coal Coking" (Issledovaniye sovremennykh printsipov koksovaniya ugley), Works of the Institute of Mineral Fuels, Vol. 4, Issue 1, 1953, 64 pp.
"The Chemistry and Origin of Solid Mineral Fuels" (Khimiya i genezis tverdykh goryuchikh iskopayemykh), Works of the First All-Union conference, 1950, Institute of Mineral Fuels, All-Union Chemical Society imeni D. I. Mendeleyev, 420 pp.

Periodical : Izv. AN SSSR. Otd. tekhn. nauk 4, 154-160, Apr 1954

Institution :

Submitted :

KUPRIYANOV, V.P.

Meeting on the use of local building materials for agricultural
construction. Izv. AN SSSR. Otd.tekh.nauk no.4:155-157 Ap '54.
(Building materials)
(MLRA 7:9)

Kunriyanov, V. P.
USSR/Agriculture - Conferences

Card 1/1 Pub. 124 .. 15/26

Authors : Davydov, S. S., Dr. of Tech. Sc., and Kunriyanov, V. P., Cand. of Tech. Sc.
Title : Aid of science to agriculture

Periodical : Vest. AN SSSR 12, 73-75, Dec 1954

Abstract : Minutes are presented of a meeting held at the Academy of Sciences USSR, at
 which the aid of science to problems of agriculture were discussed.

Institution : ...

Submitted : ...

KUPRIYANOV, V.P., kandidat tekhnicheskikh nauk.

Consultation on the utilization of fine sands for concrete and solutions.
Gidr.stroi. 23 no.3:43-44 '54. (MLRA 7:6)
(Concrete) (Sands)

BUDNIKOV, P.P.; BEREZHNOY, A.S.; BOTVINKIN, O.K.; DAVYDOV, S.S.;
GEVORKYAN, Kh.O.; GORYAYNOV, K.E.; KUPRIANOV, V.P.;
KITAYGORODSKIY, I.I.; KYKOLEV, V.G.; LAPIN, V.V.; LITVAKOVSKIY,
A.A.; MOSKVIN, V.M.; MIRONOV, S.A.; MCHEDLOV-PETROSYAN, O.P.;
PEVZNER, R.L.; SKROMTAYEV, B.G.; YUNG, V.N.; YUSHKEVICH, M.O.

academician D.S.Beliankin; obituary. Zhur.prikl.khim. 27 no.1:
3-4 Ja '54. (MLRA 7:3)
(Beliankin, Dmitrii Stepanovich, 1876-1953)

DAVIDOV, S.S., professor; KUPRIYANOV, V.P., kandidat tekhnicheskikh nauk.

Discussing problems of making calculations for building construction
units by the method of critical conditions. Stroi.prom.32 no.2:46-57
'54.

(MLRA 7:2)

(Building--Estimates)

KUPRIYANOV, V.P., kandidat tekhnicheskikh nauk.

Conference on problems of production and use of heat insulating
materials. Stroi.prom.32 no.3:47 Mr '54. (MLRA 7:5)
(Insulation (Heat))

KUDRYASHOV, I.T., kand.tekhn.nauk. Prinimali uchastiye: POPOV, N.A., prof., doktor tekhn.nauk; YEROFEYEV, Ye.A., kand.tekhn.nauk; GORYAINOV, E.E., doktor tekhn.nauk; VOLCHEK, I.Z., kand.tekhn.nauk; KUPRIYANOV, V.P., kand.tekhn.nauk; YAKUB, I.A., kand.tekhn.nauk; KEVESH, P.D., kand.tekhn.nauk; ERSHLER, E.Ya., inzh.. KHAVIN, B.N., red.isd-va; STEPANOVA, E.S., tekhn.red.; SOLNTSEVA, L.M., tekhn.red.

[Technical instructions for the manufacture of prefabricated elements from cellular autoclave concrete] Tekhnicheskie usloviya na izgotovlenie sbornykh izdelii iz avtoklavnykh ischeistyykh betonev. Moskva, Gos.isd-vo lit-ry po stroit., arkhitekt., i stroit.materialam, 1959. 79 p. (MIRA 12:6)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR (for Kudryashev). 3. Moskovskiy inzhenerno-stroitel'nyy institut imeni V.V.Kuybysheva, (for Popov, Yerofeyev). 4. Nauchno-issledovatel'skiy institut po stroitel'stvu Ministroya RSFSR (for Goryainov, Volchek, Kupriyanov, Yakub). 5. Nauchno-issledovatel'skiy institut zhelezobetona Olavmoszhelezobetona (for Kevesh, Ershler). 6. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Popov).
(Precast concrete)

KUDRYASHEV, I.T., kand.tekhn.nauk; KUPRIYANOV, V.P., kand.tekhn.nauk;
KEVESEI, P.D., kand.tekhn.nauk, nauchnyy red.; KADANER, N.I.,
red.izd-va; MEDVEDEV, L.Ya., tekhn.red.; BOROVNEV, N.K.,
tekhn.red.

[Cellular concretes; types, properties, and use] Iacheintye
betony; vidy, svoistva i primeneniye. Moskva, Gos.izd-vo lit-ry
po stroit., arkhitekt. i stroit.materialam, 1959. 181 p.

(MIRA 13:2)

(Concrete)

KUPRIYANOV, V.P., kand.tekhn.nauk

Aerated concrete and aerated silicate made with ferrosilicon.
Trudy NIIZHB no.8:210-212 '59. (MIRA 13:4)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu.
(Lightweight concrete) (Silicates)

KEVESH, P.D., kand. tekhn. nauk; ERSHLER, E.Ya., inzh.; KUPRIYANOV, V.P.,
kand. tekhn. nauk, nauchnyy red.; TYUTYUNIK, M.S., red. izd-ya;
BOROVNEV, N.K., tekhn. red.

[Air-entrained concrete made from perhydrol]Gazobeton na pergidrole.
Moskva, Gosstroizdat, 1961. 111 p. (MIRA 14:11)
(Air-entrained concrete)

KUPRIYANOV, Y.S.

Mechanism of death in animals following ligation of the portal vein [with summary in English]. *Fiziol.skur.* 42 no.11:953-956 N 156.
(MLBA 10:1)

1. Kafedra normal'noy fiziologii Bashkirskogo meditsinskogo instituta, Ufa.

(VINS, PORTAL SYSTEM, physiology,
mechanism of death in animals after ligation of portal vein (Rus))

(DEATH,
same)

KUPRIYANOV, V.S.

Reflex from vessels of the portal system on vascular tone
in the pulmonary circulation. Fiziol. zhur. 49 no.8:961-
964 Ag '63. (MIRA 17:2)

1. From the Department of Physiology, Bashkir Medical
Institute, Ufa.

KUPRIYANOV, V.S.

Reflexes from the portal system affecting respiration [with summary in English]. *Fiziol.shur.* 44 no.4:1066-1069 N '58 (MIRA 11:12)

1. Kafedra normal'noy fiziologii Bashkirskogo meditsinskogo instituta, Ufa.

(RESPIRATION, physiol.

eff. of portal pressure changes (Rus))

(BLOOD PRESSURE, physiol.

eff. of portal changes on resp. (Rus))

(VEINS PORTAL SYSTEM, physiol.

eff. of blood pressure changes on resp (Rus))

KUHRITANOV, V.S.

Some reflexes of the lesser circulation. Biul. eksp. biol. i med.
59 no.5:22-26 '65. (MEDA 78:13)

1. Kafedra normal'noy fiziologii (zav - prof. V.V. Petrovskiy)
Bashkirskogo meditsinskogo instituta, Ufa. Submitted December
12, 1963.

KUPRIYANOV, V. S.

Cand Med Sci - (diss) "Reflexes with the system of hilar vein in arterial pressure and respiration; their role in the mechanism of death of animal in portal hypertension." Kuybyshev, 1961. 14 pp; (Kuybyshev Med Inst); 250 copies; price not given; (KL, 6-61 sup, 238)

KUPRIYANOV, V.S.

Cannula and clamp for lymph and blood vessels. Fiziol.zhur. 47
no.3:403-404 Mr '61. (MIRA 14:5)

1. From the Normal Physiology Chair, Bashkirian Medical Institute, Ufa.
(LYMPHATICS) (BLOOD VESSELS)
(PHYSIOLOGICAL APPARATUS)

KUPRIYANOV, V.S.

Effect of changes in the coronary blood flow on the vascular
tonus of the pulmonary circulation. Biol. eksp. biol. i med.
60 no. 10:17-20 0 '65 (MIRA 19:1)

1. Kafedra normal'noy fiziologii (zav. - prof. V.V. Petrovskiy)
Bashkirskogo meditsinskogo instituta, Ufa. Submitted April, 15,
1964.

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30: U-3131, 11 Nov 1972

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